IAP20 Rec'U POTAPTO 22 DEC 2005

Attorney Docket No.: 10340.204-US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Svendsen et at.

Confirmation No: TBA

Serial No.: To be assigned

Group Art Unit: TBA

Filed: December 22, 2005

Examiner: TBA

For: CGTase Variants

INFORMATION DISCLOSURE STATEMENT (IDS) UNDER 37 CFR 1.97(b)

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. 1.56, 1.97 and 1.98, Applicants submit herewith references which may be material to the patentability of this application and with respect to which there may be a duty to disclose. While the references may be material under 37 C.F.R. 1.56, it is not intended to constitute an admission that the references are prior art. The filing of this IDS shall not be construed as a representation that no other material references than those listed exist or that a search has been conducted.

The references are listed in Form PTO/SB/08A, which is in accordance with the requirements of M.P.E.P. 609. A copy of the references is enclosed. It is respectfully requested that these references be considered by the USPTO in its examination of the above-identified application and be made of record therein.

This IDS is being filed within three months of the filing date of a national application or date of entry into the national stage of an international application, or before the mailing date of a first Office action on the merits, or **before** the mailing date of a first Office action after the filing of a request for continued examination. Therefore, no fee is due.

Respectfully submitted,

Date: December 22, 2005

Elias J. Lambiris, Reg. No. 33,728 Novozymes North America, Inc. 500 Fifth Avenue, Suite 1600

New York, NY 10110 (212) 840-0097

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known		
				Application Number	1 Tobe assigned L	
INFORMATION DISCLOSURE				Filing Date	December 22, 2005	
STATEMENT BY APPLICANT (use as many sheets as necessary)			ΔNT	First Named Inventor	Svendsen et at.	
				Art Unit	TBA	
	(ose as many sneets as necessary)			Examiner Name	TBA	
Sheet	1	of	2	Attorney Docket	10340.204-US	
				Number		

U.S PATENT DOCUMENTS							
Examiner Initials	Cite No. 1	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		5,631,149	05-20-1997	Matsui et al.			
<u>-</u>							
		<u>-</u> .			· .		
	+						
	_			 			
					·		
					<u> </u>		
							
				1.			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials	Cite No. 1	Foreign Patent Document Country Code ³ – Number ⁴ – Kind Code ⁵ (if known)	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6		
	1	WO 99/43794	09-02-1999					
		WO 99/43793	09-02-1999					
		WO 96/33267	10-24-1996					
	Ī	WO 2004/026043	04-01-2004		~			
		·						
			•					
	<u> </u>							
	<u> </u>							
	<u> </u>	_						
				`				
		·						

Examiner	Date	
Signature	Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner of Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	for form 1449	PA/PTO		Complete if Known		
				Application Number	a To be assigned 191	
ll l	NFORMAT	ION DISCLO	SURE	Filing Date	L December 22-2005	
STATEMENT BY APPLICANT			ΔΝΤ	First Named Inventor	Svendsen et at.	
	(use as many sheets as necessary)			Art Unit	TBA	
				Examiner Name	TBA .	
Sheet	2	of	2	Attorney Docket	10340.204-US	
			1	Number	t	

Examiner's	Cite	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title	-
Initials	No. 1	of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
		TONKOVA et al., "Bacterial Cyclodextrin Glucanotransferase", Enzyme and Microbial Technology, Vol. 22, pp. 678-686 (1998)	
		PRZYLAS et al., "Crystal Structure of Amylomaltase from Thermus aquaticus, a Glycosyltransferase Catalysing the Production of Large Cyclic Glucans", J. Mol. Biot., Vol. 296, pp. 873-886 (2000)	٠
		LEEMHUIS et al., "Engineering Cyclodextrin glycosyltransferase into a starch hydrolase with a high exo-specificity", Journal of Biotechnology, Vol. 103, pp. 203-212 (2003)	•••
		LEEMHUIS et al., "Conversion of cyclodextrin glycosyltransferase into starch hydrolase by directed evolution: The role of alanine 230 in acceptor subsite +1", Biochemistry, Vol. 42, pp. 7518-7526 (2003)	
		LEEMHUIS et al., "Hydrolysis and transglycosylation reaction specificity of cyclodextrin glycosyltransferases", J. Appl. Glycosci., Vol. 50, pp. 263-271 (2003)	
		LEE et al., "Modulation of cylcizing activity and thermostability of cyclodextrin glucanotransefrase and its application as an antistaling enzyme", Journal of Agricultural and Food Chemistry, Vol. 50, pp. 1411-1415 (2002)	
· ·		LEEMHUIS et al., "A five-residue amino acid insertion converts cyclodextrin glycosyltransferase into a starch hydrolase with a high exo-specificity", Chapter 8 (1973)	
_		BEIER et al., "Conversion of the maltogenic alpha-amylase Novamyl into CGTase", Protein engineering, Vol. 13, No. 7, pp. 509-513 (2000)	
		TAO, Bernard Y., "Cyclodextrin Glucotransferases Technology and Biocatalyst Design, Chapter 28 of Cyclodextrin Glucotransferases, pp. 372-383 (1990)	
		SVENSSON, Birte, "Protein engineering in the alpha amylase family: catalytic mechanism, substrate specificity, and stability", Plant Molecular Biology, Vol. 25, pp. 141-157 (1994)	

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner of Patents, Washington, DC 20231.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.